## THAT WHICH IS CLAIMED IS:

- 1. A voltage regulator circuit comprising:
  - an alternator driven at a variable speed;
  - a source of AC power operable with the alternator;
  - a DC load connected for receiving the power; and

at least two switchable rectifying means to rectify and control the flow of power from the alternator to the load, wherein the at least two switchable rectifying means each include input control means, and wherein the input control means is responsive to the voltage of the DC load, and also responsive to a timing pulse of selected duration, the duration chosen to insure that following a signal to an input control means responsive to a voltage of the DC load, that all other switchable rectifying means are switched on for a next conduction cycle if the variable speed is above a selected level.